

INFORME DE BÚSQUEDA DE PATENTES PARA EL No de Radicación: 13-298125						
CRITERIOS PARA LA BÚSQUEDA (anexar pantallazo o reporte en PDF, junto con los booleanos utilizados)						
Palabras clave utilizadas		Lubricant and additive formulation and Polyalphaolefins; Lubricant and formulation and Polyalphaolefins				
CLASIFICACIONES INTERNACIONALES UTILIZADAS PARA LA BÚSQUEDA		C10M111/04				
BASES DE DATOS CONSULTADAS.						
ESPACE		Patent scope		Patbase		USPTO
INFORMES DE EXÁMENES REALIZADOS EN OTRAS OFICINAS (documentos patentes, literatura no patente etc...)						
Oficina	Fecha del examen o de reporte de búsqueda de documentos	Anterioridades encontradas para el examen o reportados en el examen de búsqueda(relacionarlos todos)	Reiv. afectadas	RELEVANCIA (requisito que afecta)	FUERON TENIDOS EN CUENTA PARA EL EXAMEN EN LA OFICINA COLOMBIANA	
					SI	NO
WIPO	20/04/2015	Engineered synthetic engine oil and method of use US 6586374	1, 2, 4, 6-14, 16 / 3, 5, 15	Novedad / Nivel inventivo	X	
		Patly synthetic multigrade crankcase lubricant (law822) US 20010007851	1, 6, 7, 11 / 3, 5, 15	Novedad / Nivel inventivo	X	
		Lubricant and additive formulation US 20050124504	2	Nivel inventivo	X	
DOCUMENTOS ADICIONALES ENCONTRADOS POR EL EXAMINADOR DE ACUERDO A LOS CRITERIOS DE BÚSQUEDA.						
Lubricant and additive formulation US 20030087769						
Lubricant additive formulation US 6034038						
Hvi-pao in industrial lubricant and grease compositions EP 1907516 A1						
Additives and lubricant formulations having improved antiwear properties US 7767632						
Observaciones						
Fecha del reporte de búsqueda:		12/11/2015				

Patent US20030087769 -

www.google.com/patents/US20030087769

Google

Find prior artDiscuss this applicationView PDFDownload PDF

Lubricant and additive formulation

US 20030087769 A1

ABSTRACT

A lubricant additive formulation for increasing the performance of conventional engine lubricants for use as an engine treatment oil additive formulated for addition to conventional motor oil to improve the lubricating properties of the engine oil and enhance the performance of the engine. A preferred embodiment of the engine treatment oil additive comprises a blend of chemical constituents including a base stock selected from a synthetic base stock, a mineral oil base stock, and a severely hydrocracked base stock or combinations thereof, an oil soluble molybdenum additive, dispersant inhibitor, and selected additives such as polytetrafluoroethylene, viscosity index improvers, and extreme pressure wear agent used in combination with a conventional crankcase lubricant at about a 20 to about a 25% volume/percent or as a complete motor oil. Additional components may be added to the engine treatment oil additive formulation to enhance specific properties for special applications.

Publication number

Publication type

Application number

Publication date

Filing date

Priority date

Also published as

Inventors

Original Assignee

Export Citation

Referenced by (18), Classifications (77), Legal Events (12)

External Links: USPTO, USPTO Assignment, Espacenet

IMAGES (6)

DESCRIPTION

CLAIMS (1)

100041 This is a Continuation in Part application of Ser. No. 09/630,728 filed

03:54 p.m. 12/11/2015

Patent US20030087769 -

www.google.com/patents/US6034038

Google

Find prior artDiscuss this patentView PDFDownload PDF

Lubricant additive formulation

US 6034038 A

ABSTRACT

A lubricant additive formulation for addition to conventional motor oil to improve the lubricating properties of the engine oil and enhance the performance of the engine. The engine treatment oil additive comprises a synergistic blend of an oil soluble molybdenum additive, polyalphaolefin, ester such as a polyolester or diester, polytetrafluoroethylene, dispersant inhibitor containing zinc dithiophosphate, mineral oil base stock, viscosity index improvers, and borate ester used in combination with a conventional crankcase lubricant at about a 20 to about a 25% volume/percent. The improved performance of the engine additive in comparison with a conventional crankcase lubricants is attributable to the effect of optimizing the design parameters for each of the individual chemical constituents and combining the chemical constituents according to the present invention to obtain surprisingly good results including improved wear, oxidation resistance, viscosity stability, engine cleanliness, fuel economy, cold starting, and inhibition of acid formation.

Publication number

Publication type

Application number

PCT number

Publication date

Filing date

Priority date

Fee status

Inventors

Original Assignee

Export Citation

Patent Citations (9), Referenced by (28), Classifications (78), Legal Events (13)

External Links: USPTO, USPTO Assignment, Espacenet

IMAGES (6)

DESCRIPTION

CLAIMS (50)

04:07 p.m. 12/11/2015

Patent US20030087769 x Lubricant and formulation x Patent US6034038 - Lub x Patent EP1907516A1 - H x Patent US7767632 - Addi x Espacenet - Latipat x Google Traductor x

www.google.com/patents/EP1907516A1?cl=en

Google

Patents English French Find prior art Discuss this application

Hvi-pao in industrial lubricant and grease compositions

EP 1907516 A1 (text from WO2007005094A1)

ABSTRACT

The invention relates to industrial lubricant and grease compositions containing high viscosity index polyalphaolefins (HVI-PAO). The use of HVI-PAOs in industrial oils and greases application provides advantages in improved shear stability, wear property, foam property, energy efficiency and improved overall performance.

DESCRIPTION (OCR text may contain errors)

HVI-PAO IN INDUSTRIAL LUBRICANT AND GREASE COMPOSITIONS

FIELD OF THE INVENTION

[0001] The invention relates to industrial lubricant and grease compositions containing high viscosity index polyalphaolefins (HVI-PAO).

BACKGROUND OF THE INVENTION

[0002] Polyalphaolefins (PAOs) of different viscosity grades are known to be useful in synthetic and semi-synthetic industrial oil and grease formulations. See, for instance, Chapters 22 and 23 in Rudnick et al., "Synthetic Lubricants and High-Performance Functional Fluids", 2nd Ed Marcel Dekker, Inc., N. Y. (1999). Compared to the conventional mineral oil-based products, these PAO-based products have excellent viscometrics, high and low temperature performance and energy efficiency under routine conditions and ordinary replacement schedules.

[0003] The viscosity-temperature relationship of a lubricating oil is one of the

Publication number	EP1907516 A1
Publication type	Application
Application number	EP20060769901
PCT number	PCT/US2006/015992
Publication date	Apr 9, 2008
Filing date	Apr 26, 2006
Priority date	Jun 29, 2005
Also published as	CA2608181A1, CA2608181C, US8399390, US20070000807, WO2007005094A1
Inventors	Margaret M. Wu, 5 More »
Applicant	ExxonMobil Chemical Patents, Inc., A Corporation of the State of Delaware
Export Citation	BiBTeX, EndNote, RefMan
Non-Patent Citations (1), Classifications (31), Legal Events (3)	
External Links: Espacenet, EP Register	

CLAIMS (OCR text may contain errors)

We Claim:

1. An industrial oil or grease formulation comprising an HVI-PAO.
2. The industrial oil or grease formulation according to Claim 1, said formulation not containing polymeric thickeners.
3. The industrial oil or grease formulation according to any one of the preceding claims, comprising 1 to 99 wt % of at least one HVI-PAO.
4. The industrial oil or grease formulation according to any one of the preceding claims, wherein said HVI-PAO is obtained by oligomerizing at least one alpha olefin using a catalyst selected from reduced metal oxides, metallocenes, and Zeigler-Natta catalyst.

ES 04:08 p.m. 12/11/2015

Patent US20030087769 x Lubricant and formulation x Patent US6034038 - Lub x Patent EP1907516A1 - H x Patent US7767632 - Addi x Espacenet - Latipat x Google Traductor x

www.google.com/patents/US7767632

Google

Patents Application Grant Find prior art Discuss this patent View PDF Download PDF

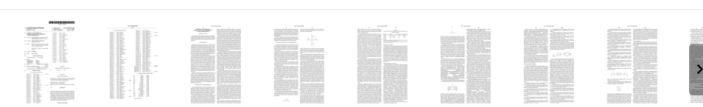
Additives and lubricant formulations having improved antiwear properties

US 7767632 B2

ABSTRACT

Lubricated surfaces, lubricant compositions for lubricating a surface, and methods for increasing antiwear properties in lubricants. The lubricated surface is provided by a lubricant composition containing a base oil of lubricating viscosity and an amount of at least one hydrocarbon soluble titanium compound effective to provide an increase in antiwear properties of the lubricant composition greater than an increase in antiwear properties of the lubricant composition devoid of the hydrocarbon soluble titanium compound.

IMAGES (12)



DESCRIPTION

TECHNICAL FIELD

The embodiments described herein relate to particular oil soluble titanium additives and use of such titanium additives in lubricant oil formulations, and in particular to oil soluble titanium additives used as antiwear agents for lubricant

CLAIMS (25)

1. A lubricated surface of an internal combustion engine comprising a lubricant composition containing a base oil of lubricating viscosity, an amount of at least one hydrocarbon soluble titanium compound that is effective to provide from about 1 to about 1500 ppm titanium to the lubricant composition, and an amount

ES 04:09 p.m. 12/11/2015